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# **UNIVERSITY OF ILLINOIS**

## **Improvements and Extensions**

**1895-96**

# IMPROVEMENTS AND EXTENSIONS AT THE UNIVERSITY.

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The appropriation of \$424,000.00 by the Legislature to the University has rendered it possible to strengthen and develop the existing work and to push it forward into new fields. At the meeting of the Board of Trustees, in commencement week, improvements and additions to the equipment and to the instructional force were determined on as indicated herein.

## THE NEW LIBRARY BUILDING.

Included by the Legislature among the appropriations for specific objects is one of \$150,000.00 for the erection of a library building. This appropriation is available immediately and the committee on buildings and grounds is considering plans for the early erection of the building. The committee has offered premiums amounting to \$1,200.00 for competitive designs. The building will be fire-proof, and architecturally will be an adornment to the campus.

Besides the appropriation for the new building the Legislature set aside the sum of \$3,000.00 a year for accessions to the library.

## ENGINEERING HALL AND EQUIPMENT.

The magnificent new Engineering Hall, which was dedicated last November, is still in process of internal equipment and the University appropriations include \$5,000.00 for the completion of the furnishings. This, in addition to the amount already expended, will make the building one of the best equipped in the country.

The equipment of the College of Engineering will be much enlarged during the year by the expenditure of \$10,000.00 for additional apparatus and appliances.

## REORGANIZATION OF THE SHOPS.

In connection with the extension of the equipment for engineering, the work of the College of Engineering will be much further improved and facilitated by the addition of a new machinery hall and the reorganization of the mechanical shops.

A new one story shop will be erected in the neighborhood of Machinery Hall and all the iron-working machinery in the latter building will be transferred to the new shop. The rooms on the second floor of Machinery Hall, which will be made vacant by this transfer, will be occupied by the machinery now in the architectural shop. The architectural wood shop will be discontinued, as a separate establishment, and all the wood working connected with the Uni-

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versity instruction will be embraced in a single department and carried on in this building.

That part of the mechanical laboratory now located in the basement of the Chemical Laboratory, will also be transferred either to Machinery Hall or to the new shop.

The rooms thus vacated in Machinery Hall will allow the extension of the department of mechanical engineering and of the testing laboratory of applied mechanic. This extension will be immediately effected.

These changes and extensions of the mechanical equipment will be completed, it is believed, by the opening of the University in September and will give us one of the very best University organizations in the United States.

### THE ASTRONOMICAL OBSERVATORY.

The work in astronomy has been long hampered from lack of proper equipment. The Legislature, however, has made an appropriation of \$15,000.00 for a new astronomical observatory with the latest improvements. It is hoped that the observatory will be ready for use during the fall term. It will contain an 8 inch equatorial telescope with driving clock and with photographic and spectroscopic attachments, an astronomical transit, a zenith telescope, a chronograph, and the necessary clocks, chronometers, and other small instruments. The dome will be metal and of the latest pattern.

### LABORATORY OF VEGETABLE PHYSIOLOGY.

Vegetable physiology has heretofore been taught by lectures and textbook methods supplemented by such experiments and observations as could be made out of doors. During the last term efforts have been made to introduce true laboratory work in the subject and students have thus spent two-fifths of their time. It is now proposed to add to the laboratory a glazed structure and to provide full sets of apparatus by which the activities of living plants can be studied experimentally and by which the effects of external conditions and agencies upon such plants can be ascertained. It is expected that this work will be useful both upon the scientific and the practical sides.

The botanical laboratory will be otherwise enlarged and improved.

Extensions of the work in bacteriology for chemists, sanitary engineers, and agriculturists are proposed.

### ZOOLOGY.

The principal new features of the work of the department of zoölogy for the coming year are:

1. An enlargement and more thorough organization of second year work in zoölogical courses.
2. A considerable increase of the offerings in entomology.
3. The substitution of a course in elementary biology for the minor course in zoölogy previously offered.
4. The arrangement of special courses for teachers of natural science, made with particular reference to graduates of normal schools and others similarly situated.
5. *The permanent and complete equipment of the University of Illinois Biological Experiment Station on the Illinois River, for which a new building and equipment are now provided, which will be regularly opened to special advanced students in 1896.*

### AGRICULTURE.

The liberal and increasing endowments from the general government for agricultural and mechanical instruction are resulting in substantial advantage

to the University. The College of Agriculture is being thoroughly reorganized upon a broad and comprehensive plan, which, when completed, will, it is hoped, meet the needs of this great agricultural state.

The course of study extends over four years, the same time that is given to all other courses. Instruction in agriculture and horticulture begins immediately in the freshman year and is distributed throughout the course.

### VACCINE FARM.

By Senate Bill No. 499 the legislature provided for establishing a vaccine farm and laboratory at the University for the purpose of supplying pure vaccine virus to the physicians of the state at cost. Preparations are now going forward to that end. The professor of veterinary science will have immediate charge of the work and the whole will be under the general supervision of our eminent bacteriologist, Professor Thomas J. Burrill, who will certify to the character of the product. It is hoped that active operations may be commenced in September. Future announcements will be made to the physicians of the state.

### STATE SCHOLARSHIPS.

The recent Legislature passed a very important act, setting up a systematic plan for bringing the advantages of the University to the attention of all the schools of the state and creating University State Scholarships, free of all fees, in all the Senate and Assembly districts of the state. It is now too late make this plan effective for the coming year, but all arrangements will go forward to make it completely so in the year ensuing. Prior to the Christmas holidays the State Superintendent of Public Instruction will give notice in all the High Schools of a competitive examination to be held at the county seat in each county by the County Superintendent on the first Saturday of June next, at which the State Scholarship belonging to the county will be awarded to the most proficient scholars appearing at the examination. Aside from the matter of fees the receipt of these scholarships will be a distinctive honor worthy of the highest effort in each county and will help bring the University into close and living relations with the public school system in fact as well as in law.

### EXAMINATION OF CANDIDATES FOR MEDICAL COLLEGES.

At the request of the State Board of Health the University authorities will undertake the examination of such candidates for admission to the medical colleges of the state as do not present the evidences of proficiency required for admission. The first examination will doubtless be held in September, in Chicago. The precise time and place and the scope of the examination will be announced in special circular.

### COURSE OF LECTURES BY SPECIALISTS.

The Board of Trustees has provided for a course of lectures, free to University people, by eminent specialists with a view to stimulating the different lines of work in which the University is engaged and arousing an interest in work not yet undertaken. This will enable the faculty to bring to the University many of the most distinguished specialists of the country during the next year and must prove of great advantage to the students and all the interests involved.

### ORATORICAL PRIZES.

One hundred dollars has been provided for special prizes to the students showing the greatest proficiency in oratorical and literary contests. The conditions have not yet been determined, but will be announced in due time.



## EXAMINATIONS OF THE POTABLE WATERS OF THE STATE.

An appropriation was made by the legislature for a systematic chemical survey of the waters of the state. Arrangements are already making to collect samples of waters from wells, streams, and other sources of supply, and to determine by analysis their purity and sanitary condition. The examination will be conducted by the department of chemistry and the results published in a series of bulletins. This subject is one of first and growing importance in the state. The geological department is just entering upon a systematic investigation of the sources of water supply and with the two departments coöperating the University hopes to render a service of consequence to the people of Illinois.

## GENERAL IMPROVEMENTS.

Many improvements of a minor character will be made during the vacation, which will both facilitate work and make the surroundings of the University more pleasant. The entire janitor service of the University will be reorganized and a more efficient corps employed. A superintendent of buildings and grounds will be appointed, who shall have general charge of all janitors and other persons employed thereabout. The janitors will be commissioned as special police by the cities of Champaign and Urbana, to serve about the University.

All driving of heavy vehicles through the grounds will be prohibited, all persons will be required to keep off the lawns between the principal buildings, and bicycles will not be permitted on any of the walks.

An appropriation has been made for street improvements also. With this Green street will be paved between Mathews avenue and Wright street, and a walk will be laid from Military Hall to University Hall.

## NEW DEPARTMENTS AND ADDITIONS TO THE CORPS OF INSTRUCTION.

Not only will most of the already existing departments be strengthened by additional instructors, but some work not heretofore done in the University will be undertaken.

### SCHOOL OF MUSIC.

An important change is made in the musical department of the University, in that it is made an integral part of the College of Literature and Arts. The purpose is to develop a school of music that will do credit to the University and the state. The department will be in charge of Professor Walter Howe Jones, assisted by Miss Elinor Ellsworth and Mr. William L. Steele.

Professor Jones has been an instructor in music in DePauw University for over three years, and is a man of wide experience in musical matters. He was a student of Clarence Eddy in Chicago and studied in Berlin with Ludwig.

Deffe and Madame Carreno. He is a superb teacher of the piano and pipe organ, an excellent conductor, and a composer of much promise.

Miss Elinor Ellsworth, instructor of vocal music, received the degree of bachelor of music from Elmira College in 1892, after which she pursued her studies with Madame Marchesi in Paris. Miss Ellsworth has a soprano voice of unusual range and power, which received high praise from such critics as Walter Damrosch, Victor Herbert, and Percy Averill, while she was studying in New York City last winter. She has had experience in concert work and as a teacher.

Mr. William L. Steele, the holder of the newly established scholarship in music, has been the leader of the University military band for two years, is a fine cornet player, and has had considerable experience in orchestral work.

A statement of the new courses in music will be found below.

## POLITICAL SCIENCE.

Political Science has heretofore been neglected in the University. For two years a single term's course has been given by the Professor of Political Economy. Beginning next year, however, there will be a separate department of Political Science in the College of Literature and Arts. The chair will be filled by Mr. Charles W. Tooke, Ph. D., with the rank of assistant professor. Mr. Tooke was graduated at Syracuse University in 1891. After teaching for two years he pursued graduate study at Cornell University and Columbia College, receiving his doctor's degree at the latter institution.

## HISTORY.

The department of history will be strengthened by the addition of another instructor, Mr. Frank Zinkeisen, Ph. D., who will have charge of the instruction in mediæval history. Dr. Zinkeisen is a graduate of Harvard and received his doctor's degree in Berlin in 1893. He has been tutor and assistant in Harvard for the past two years.

## ROMANCE LANGUAGES.

The vacancy caused by the resignation of Professor J. D. Bruner has been filled by the appointment of Professor George D. Fairfield, of DePauw University. Professor Fairfield was graduated at Oberlin College in 1888 and received the degree of A. M. from that institution in 1892. From 1889 to 1893 he was U. S. vice-consul at Lyons, France, and a student in the University of France. He has also studied Italian and Spanish under native teachers. The department promises to be even stronger than ever.

## PEDAGOGY.

The department of Pedagogy will be reorganized under the direction of Professor Arnold Tompkins. Professor Tompkins is a graduate of the University of Indiana, where he also received his master's degree. He was Professor of Pedagogy at DePauw University for five years, is the author of several books, is thoroughly familiar with public schools and is in every way well equipped for our work.

## PHYSICAL TRAINING.

The department of physical training has been entirely reorganized. Hereafter the work will be under the direction of one man, assisted by a lady who

will give the instruction provided for the young women of the University. The University has been fortunate in securing as head of the department, Mr. Henry H. Everett, who has heretofore been assistant director of the gymnasium in the University of Wisconsin. He is himself a well-trained athlete, and has had much experience in teaching, having been assistant in the Chicago Y. M. C. A. gymnasium and at the Casino Pastime Academy.

The new director of the women's gymnasium is Miss Ella H. Morrison. Her special education was obtained in Europe. She has taught at the Ohio State University and has spent the past year with Dr. Sargent at Harvard and in the leading women's gymnasiums in Boston.

The assistant director of the gymnasium and coach of the athletic teams is Mr. George A. Huff, who is well known to the students of the University. He has an inter-collegiate reputation as an athlete, especially as a foot-ball and base-ball player, which is as broad as the country.

### OTHER CHANGES IN THE INSTRUCTIONAL FORCE.

The students of the University will be pleased to know that Professor Edward Snyder will be at his post again next year, with health restored, and that Professor J. M. White will also resume his former position after his year's travel and study abroad.

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## NEW COURSES AND CHANGES IN COURSES NOW OFFERED.

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### HISTORY.

1. Mediaeval and Modern European History.—Introductory course. *Fall, winter, and spring terms, three-fifths study.* Associate Professor Greene and Assistant Professor Zinkeisen.

2. Contemporary Political History.—Constitutional tendencies as represented by political parties. The course will include the history and present position of political parties in the leading states of Europe and in the United States. This course may properly be taken in connection with Political Science 1. *Fall, winter, and spring terms, two-fifths study.* Associate Professor Greene and Assistant Professor Zinkeisen.

3. American History.—The origin and growth of the nation from the beginning of English colonization in North America to the close of the reconstruction period. *Fall, winter, and spring terms, full study.* Associate Professor Greene. *Required, History 1 or 2.*

4. English Constitutional History.—Special attention is given to the earlier formative period. *Fall, winter, and spring terms, three-fifths study.* Assistant Professor Zinkeisen. *Required, History 1, 2.*

5. Europe in the Sixteenth Century.—The protestant reformation and the counter-reformation. *Fall term, three-fifths study.* Associate Professor Greene. *Required, History 1.*

6. England under the Stuarts. The Puritan revolution. *Winter term, three-fifths study.* Associate Professor Greene. *Required, History 1.*

7. Modern European History.—Europe from the age of Louis XIV. to the present time. *Fall, winter, and spring terms, three-fifths study.* Assistant Professor Zinkeisen. *Required, History 1.*

8. Seminary in American History. Training in the use of the sources.

In 1895-96 the general subject for investigation will be the French occupation of the Mississippi valley, and Illinois politics from 1850 to 1860. *Fall, winter, and spring terms, two-fifths study.* Associate Professor Greene.

Course 8 is open to graduates and also to seniors of high standing who take or have taken History 3. Students who propose writing their baccalaureate theses in history are strongly urged to do so in connection with the work of course 8. Graduates who do a prescribed amount of additional work may count the course as a full study.

9. History of social institutions in England, with special attention to the middle ages. *Fall, winter, and spring terms, two-fifths study.* Assistant Professor Zinkeisen. *Required, History 1; Economics 1.*

## POLITICAL SCIENCE.

1. Political institutions.—Comparative study of modern political systems, their historical development and practical operation. Lectures, reports and discussions. *Fall, winter, and spring terms, three-fifths study.* Assistant Professor Tooke.

2. Jurisprudence.—Elementary course in the origin, development and classification of law. Lectures. *Fall term, two-fifths study.* Assistant Professor Tooke.

3. Roman Law.—Early history. The classical jurisprudence. Legislation of Justinian. Influence of the Roman system. Lectures. *Winter and spring terms, two-fifths study.* Assistant Professor Tooke.

4. International Law.—Sources and historical development. Essential powers of states, their rights and their obligations. Laws and usage in time of war. History of American diplomacy. *Fall, winter, and spring terms, two-fifths study.* Assistant Professor Tooke.

5. Comparative Administrative Law.—General principles of administrative law of United States (national and commonwealth), England, France, and Germany. The appointment, tenure and duties of officers. Historical and comparative study of local government. *Fall, winter, and spring terms, two-fifths study.* Assistant Professor Tooke.

6. Comparative Constitutional Law.—The constitution of the United States, history and development. Comparison of the provisions of the constitutions of United States, England, Germany and France. *Fall, winter, and spring terms, two-fifths study.* Assistant Professor Tooke. (Omitted 1895-96.)

7. Law of Municipal Corporation.—History and legal status of the American Municipality. To supplement course 5. *Fall and winter terms, two-fifths study.* Assistant Professor Tooke.

8. Law of Taxation.—Nature of taxing power. Constitutional limitations. Procedure of tax administration. Remedies open to tax payers. *Spring term, two-fifths study.* Assistant Professor Tooke.

9. Seminary in Administrative Law. Topics to be arranged.

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## PEDAGOGY.

1. The Psychology of the Teaching Process:

a. The nature and organic elements of the Process.

b. Various illustrations of the process in different subjects, both by construction and by analysis. *Fall term, full study.* Professor Tompkins.



2. The Aim, or Motive, in teaching:
    - a. The true aim as determined by the nature of life.
    - b. The various aims as consciously held at present by different countries and classes of people. Such diversity accounted for.
    - c. The aim as shown in variation through historical development. The history of educational ideals. *Winter term, full study.* Professor Tompkins. *Required, Pedagogy 1.*
  3. The Universal Form of Method in Education:
    - a. In its subjective aspect.
    - b. In its objective aspect.
    - c. The relation of logic, ethics, and esthetics to method in education—the concrete unity of “a” and “b”. *Spring term, full study.* Professor Tompkins. *Required, Pedagogy 2.*
  4. The general movements of the mind in the acquisition of truth, beauty, and virtue specified. *Fall term, full study.* Professor Tompkins. *Required, Pedagogy 3.*
  5. Special movement of the mind in learning.
    - a. How to think and appreciate the truth in individual objects.
    - b. How to think and appreciate the truth in general objects.
    - c. The analysis and preparation of lessons on a variety of subject matter in application of the universal methods of thought above described. *Winter term, full study.* Professor Tompkins. *Required, Pedagogy 4.*
  6. The Psychological and the Logical factors in educational method.
    - a. Construction of a course of study for the public schools as determined by the foregoing factors.
    - b. The historical development of courses of study. *Spring term, full study.* Professor Tompkins. *Required, Pedagogy 5.*
  7. The School, the instrument of education:
    - a. Connected with and differentiated from the other social institutions.
    - b. The inherent law of the school ascertained.
    - c. School organization as determined by the law.
    - d. School management and supervision under the law. *Fall term, full study.* Professor Tompkins.
  8. School systems:
    - a. In different countries, as at present organized.
    - b. Historical development of school systems.
    - c. The school systems and present state of education in Illinois. *Winter term, full study.* Professor Tompkins. *Required, Pedagogy 7.*
  9. The Philosophy of education:
    - a. Its nature, scope, and power.
    - b. The relation of system<sup>2</sup> of philosophic thought to educational ideals and methods.
    - c. The pedagogical bearings of the other leading departments of thought. *Spring term, full study.* Professor Tompkins. *Required, Pedagogy 8.*
- The foregoing is a consecutive unfolding of the subjects, and, in the main it can be most satisfactorily pursued in the order above stated. The matter relating to school and that relating to instruction may each, however, be taken without the other as a required basis. Other readjustments may be made to suit special needs and capacities of the student. But in general each topic requires the preceeding. As further required preparation, the student should as soon as possible, if he has not already done so, acquire a good general knowledge of

psychology and philosophy as provided for in those departments. The student should have at least one year's work in each of these subjects—the more the better.

## MUSIC.

**Pianoforte.**—A thorough course of study from the beginning, including formation, and position of fingers, hands, wrists, and arms, passing through different grades of technique, and on to the higher art of musical interpretation. The most approved studies will be used in connection with carefully selected work from the different composers of the classical, the romantic and the modern schools.

**Organ.**—Preparatory pedal studies, exercises combining the use of the manuals and pedals, pedal phrasing studies, exercises in registration, and studies from the works of the best known writers for the organ.

*Pupils who expect to study the organ must have had at least one year's study on the pianoforte or cabinet organ.*

**Harmony, Theory, Counterpoint, Fugue, and Composition.** Courses in these subjects will be given as occasion requires. They will be made thorough, enabling the student who completes them to have a comprehensive knowledge of the theory of music.

## LECTURES ON DOMESTIC ECONOMY.

Arrangements have been made for a course of eight lectures on domestic economics by Mrs. Helen Campbell, of Madison, Wis. Mrs. Campbell is well known as a writer, having contributed frequently to the periodicals and being the author of several books, among them one on domestic economy.

The lectures will not be confined to "cooking" but will extend to all the matters which are factors in the material comfort and artistic elegance of the home. The lectures will be accompanied, as far as possible, with practical demonstrations.

Mrs. Campbell will remain here two weeks and at the end of the course those who so desire may have an examination on the lectures.

## PHYSICAL TRAINING.

Each student who takes physical instruction is expected to undergo a physical examination at the beginning and end of every year, in order that his physical condition may be known and suitable exercises and advice given. Systematic class work will be given in the use of dumb bells, wands, bar bells, foils, Indian clubs, and on all pieces of gymnastic apparatus. Sparring and wrestling will be given to advanced students.

During the fall and spring terms outdoor games and exercises will receive considerable attention; during the winter term indoor games and athletic work will be made interesting by public entertainments and contests. Lectures and talks on hygiene, physical training, etc., will be given during the winter term. Track athletics, football, baseball, etc., will receive careful attention and special facilities will be provided for this work.

A large, pleasant gymnasium is provided for the women of the University and it is the intention of the director that it be used by those students who for any reason fall below the normal in body development and in strength. Special attention is given to the correction of those inequalities of hips, shoulders and vertebrae which prevent the harmonious development of the body. Each student comes under the personal observation of the director and is given exercises to meet her special needs.

For students of average or above the average vigor the regular work of the course affords scientific and complete means of increasing the strength and size of the muscles, of educating nerve and of gaining agility and grace. Health, strength, and nervous force, which are the fundamental aims of all gymnastic work in the schools, are shown to be closely dependent upon an erect carriage, correct methods of walking, breathing and talking, ease of movement, and power to relax completely and rest.

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## CHANGES IN ARCHITECTURAL DEPARTMENT.

Hereafter students in Architectural Engineering will take the same course in shop practice as the students of Mechanical Engineering. Freshmen in Architecture will have the option of taking either shop practice or free hand drawing.

## THE PUBLIC INTERESTS.

The University is not only anxious to extend every possible facility to its students, but also to promote the interests of the people of the state in all possible ways. It will therefore thank any person who will offer practical suggestions of ways in which it may render service to the common interests of the state.

 For catalogue and detailed information write

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